

Remarks

Independent claims 1 and 19 have been rejected under 35 U.S.C. 103 (a) as being "unpatentable" over Salonaho in view of Chawla. That rejection is respectfully traversed.

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Salonaho (US 6 317 600) discloses a method for load control.

Such a method is adapted to be applied in a radio system and proposes to handle a load process in a cell to control connection quality.

In function of a load result, some decisions can be taken to balance the load in the cell in order to prevent overload situations and improve the connection quality (page 2, lines 17-19).

In the cell, a load result is computed taking into account some values resulting from a measurement of different types of signal strength in the cell. Then, such a load result is compared with a threshold value to make the radio system able to take some decisions to prevent an overload. These decisions can be reducing the data transmission rate in the cell (claim 1 of Salonaho), or reducing the data transmission rate in connections having the highest energy per symbol and increasing the data transmission rate having the smallest energy per symbol (claim 5 of Salonaho). Such decisions can be also avoiding the establishment of new connections (claim 6 of Salonaho).

More precisely, Salonaho proposes to obtain the load result from a computation of values corresponding to different types of signal strength in the cell. Thus, two different signal types are considered in the cell: the desired signals and the interference signals.

Values are obtained from the strength measurement of the desired signals, and values are obtained from the total strength measurement of the interference signals and the desired signals. Then, the load result is computed by proportioning to one another the values corresponding to different types of signal strength.

Based on a comparison between this load result and the threshold value, the radio system can decide whether a change of data transmission rate is needed (page 8, lines 18-26).

The Examiner seems to consider that values are obtained of at least one quantity based on measurements made on radio channels in the cell, this quantity being compared to at least one associated parameter in a procedure for managing the radio resources in the cells.

According to the Examiner's analysis, the quantity is compared to one parameter. Consequently, it appears that the quantity could correspond to the load result and the parameter could correspond to the threshold value.

The following sections are based on this hypothesis.

The Examiner considers that Salonaho teaches a method of selecting the value of a parameter employed by base station control units.

But the threshold value, which is considered as being the parameter, is a predetermined measure corresponding to the highest load level allowed in the cell (page 2, lines 51-53; page 5, lines 6-8). Moreover, Salonaho does not suggest that such a threshold value could be adapted during the application of the method.

On the basis of this hypothesis, the Examiner's analysis seems to be erroneous about the handling of such a parameter, which is a static value during the application of the method.

According to another hypothesis, the associated parameter could be a parameter included in a load balancing procedure. The following sections are based on this other hypothesis.

Such a parameter could be a parameter determining a data transmission rate and could be adapted on the basis of the comparison between the load result and the threshold value.

When the radio system takes the decision to balance the load in the cell, a base station can transmit a command to a subscriber terminal concerning the change of the data transmission rate which is considered as the associated parameter. After acknowledging the command, both the base station and the subscriber terminal use the reduced data transmission rate, which improve the interference tolerance in the cell (page 4, lines 58-67).

In this respect, it could be considered that a value of such a parameter is adapted for the load balancing purpose in the cell.

But, this parameter is only adapted on the basis of the comparison result between the load result and the threshold value.

Contrary to the Examiner's analysis, Salonaho does not suggest that this parameter is compared with the quantity, which is the load result.

Moreover, Salonaho does not suggest that the value of the parameter is adapted in function of different values obtained for the load result.

More generally, it does not describe nor suggest any method to adapt such a parameter in function of a qualitative analysis of the difference between the load result and the threshold.

Consequently, Salonaho does not suggest any comparison of any values with such a parameter.

Consequently, on the basis of this other hypothesis, a value of such a parameter is not adapted in such a way that a determined amount of the values obtained of the quantity are different from the value of this parameter.

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Further, the Examiner considers that Salonaho in combination with Chawla makes obvious a method which includes maintaining statistics of the values obtained for the quantity or a determined fraction of the values obtained of the quantity are greater than the value of the associated parameter.

Chawla proposes to collect received signal strength (RSS) or path loss measurements, whose distribution is analyzed cell by cell as illustrated in table 1 (columns 6-7) or table 2 (column 11).

In this respect, it could be considered that Chawla maintains some statistic of the values obtained for a quantity, such quantity being the RSS or path loss.

However, Chawla does not suggest to adapt the value of an associated parameter by means of the statistic obtained for the RSS or path loss quantity.

On the other hand, Salonaho does not suggest to adapt the value of the parameter on the basis of the value or values of the quantity, said parameter being the threshold value or being a parameter linked to a data transmission rate.

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In conclusion, Salonaho or a combination of Salonaho and Chawla fail to disclose or suggest the claimed feature that the value of an associated parameter is adapted for the cell in such a way that, according to statistics maintained for a quantity derived from radio channel measurements, a determined fraction of the values obtained of said quantity are greater than the value of the associated parameter, where the measured quantity is compared to the resulting associated parameter in a radio resource management procedure.

That feature is present in both independent claims 1 and 19. Since it is suggested by none of the cited references, it is respectfully requested that the 35 U.S.C. 103 rejection of these two claims be reconsidered.

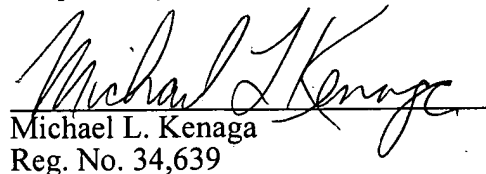
Claims 1 and 19 are believed to be allowable. The same conclusion holds for the dependant claims 2-18 and 20-36, because these claims depend on the allowable claims 1 and 19, and also because of the specific features recited in these dependent claims.

As an aside, Applicant notes that the form PCT/DO/EO/903, mailed March 12, 2001, indicates that the international search report and copies of the references cited therein were received by the US Patent Office acting as the elected office. The manual of patent examining procedure indicates at Chapter 609 that the "Examiner will consider the documents cited in the international search report in a PCT National Stage Application when the Form PCT/DO/EO/903 indicates that both the international search report and copy of the documents are present in the national stage file. In such a case, the Examiner should consider documents from the international search report and indicate by a statement in the first Office Action that the information has been considered. There is no requirement that the Examiner lists the documents on a PTO-892 Form."

It does not appear that the Examiner has indicated that all of the references cited in the search report have been considered. Applicants request that the Examiner provide such indication.

Favorable consideration and prompt allowance of the application are respectfully requested.

Respectfully submitted,


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